K.MD Which is Heavier?

Alignments to Content Standards: K.MD.A.2

Task

Materials

- Blackline Master
- Pencil or Crayons
- Balance Scale
- Objects to compare (sample list, teacher can use these or other objects like this they have in their classroom)
- a small book
- a pair of scissors
- a bundle of 4 crayons
- a bottle of Elmer's glue or a glue stick
- a wooden block from the classroom block set
- a marker
- white board eraser

Actions

First, the teacher will teach a mini-lesson about the concept of weight. Kindergarteners are very familiar with "big" and "little." The teacher should go over the terms heavy, heavier, light and lighter and hold a short discussion about little and big vs. light and heavy. (For a more detailed lesson on this concept see K.MD Longer and Heavier? Shorter and Heavier?

The teacher will pre-select a group of classroom objects (8-12) for the students to use. Each student will choose two objects to weigh. Each object will go in one side of the balance scale. The object which goes down in the balance scale is the heavier object. Students can then hold the each object in one hand to physically experience what the

scale has told them.

Students will then fill in the blackline master by drawing each object in the correct box. Students will repeat the activity with another pair of objects.

Notes on Implementation:

(1) The teacher should use real classroom items that the students use frequently. This will show them that measuring is a real world skill and relates to their lives.

(2) The teacher can label the items so students can copy the words onto the blackline master. However, drawing the objects might be easier for students. It depends on when in the year this task is implemented and the students' writing skills at that time. The goal of the worksheet is for students to do an experiment and then to record. If it is messy or the pictures do not come out perfectly that is okay. The richest learning in this task comes from the students' experience measuring, comparing and recording as best they can, not the end product on paper.

IM Commentary

The purpose of this task is for students to compare two objects to determine which is object is heavier and which object is lighter. This task speaks to the most basic level of measuring for kindergarteners, comparing the weight of one object to another without reference to a third unit (such as unifix cubes or counting bears). Once students can easily compare objects and competently discuss their findings they can move on to K.MD How Heavy?

K.MD How Heavy? provides an extension for students who are ready for a more challenging measuring activity. The kindergarten standards do not specify that students must measure using unifix cubes, so if a student can do this task they have fulfilled K.MD.2 on a basic level; this standard asks students to "directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference." (In this case students are comparing the objects to see which has more weight, although of course we use the term heavier instead of "more weight"!)

However, most kindergarteners will be ready to do the extension task. It is best practices to expose students who are ready to the "stretch" skill in K.MD How Heavy?,

and if they master the skills that are developed in K.MD How Heavy? the teacher will know that his/her students have attained a level beyond what is required by K.MD.2.